



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

MV

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,675	10/31/2001	Thomas D. Hanan	K35A1023	5322
35219	7590	09/14/2006	EXAMINER	
WESTERN DIGITAL TECHNOLOGIES, INC. ATTN: SANDRA GENUA 20511 LAKE FOREST DR. E-118G LAKE FOREST, CA 92630			POPHAM, JEFFREY D	
		ART UNIT	PAPER NUMBER	
		2137		
DATE MAILED: 09/14/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/003,675	HANAN, THOMAS D.	
	Examiner	Art Unit	
	Jeffrey D. Popham	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 June 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 October 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date 20060718.
 5) Notice of Informal Patent Application
 6) Other: _____.

Remarks

Claims 1-6 are pending.

Response to Arguments

1. Applicant's arguments, see Remarks, filed 6/22/2006, with respect to the rejection(s) of claim(s) 1-6 under 35 U.S.C. 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made with Hamlin (U.S. Patent 7,003,674), Nowaza (U.S. Patent 5,235,641), and Torrubia-Saez (U.S. Patent 6,966,002) in view of Nowaza and/or Vogt (U.S. Patent 6,681,304).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamlin (U.S. Patent 7,003,674).

Regarding Claim 4,

Hamlin discloses in a computer system including a host computer, a disk drive host interface, and a disk drive having a disk controller, a method for accessing a mailbox file associated with a first range of disk drive host interface addressable locations, the method comprising the steps of:

Recognizing a command from a host operating system in reference to the mailbox file associated with the first range of disk drive host interface addressable locations (Column 5, line 58 to Column 7, line 27); and

Responding to the command by performing within the disk controller an executable function characterized by the contents of the mailbox file (Column 5, line 58 to Column 7, line 27).

Regarding Claim 5,

Hamlin discloses that the first range of disk drive host interface addressable locations refers to a storage space allocated in at least one of a disk storage medium and a computer memory associated with the disk controller (Column 5, line 58 to Column 7, line 27).

Regarding Claim 6,

Hamlin discloses that the mailbox file contains encrypted information (Column 5, line 58 to Column 7, line 27).

3. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nowaza (U.S. Patent 5,235,641).

Regarding Claim 4,

Nowaza discloses in a computer system including a host computer, a disk drive host interface, and a disk drive having a disk controller, a method for accessing a mailbox file associated with a first range of disk drive host interface addressable locations, the method comprising the steps of:

Recognizing a command from a host operating system in reference to the mailbox file associated with the first range of disk drive host interface addressable locations (Column 6, line 35 to Column 7, line 7); and

Responding to the command by performing within the disk controller an executable function characterized by the contents of the mailbox file (Column 7, lines 3-27).

Regarding Claim 5,

Nowaza discloses that the first range of disk drive host interface addressable locations refers to a storage space allocated in at least one of a disk storage medium and a computer memory associated with the disk controller (Column 6, line 35 to Column 7, line 27).

Regarding Claim 6,

Nowaza discloses that the mailbox file contains encrypted information (Column 6, line 35 to Column 7, line 27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torrubia-Saez (U.S. Patent 6,966,002) in view of Nowaza.

Torrubia-Saez discloses in a computer system including a host computer, a disk drive host interface, and a disk drive having a disk storage medium with a first range of disk drive host interface addressable locations, a method for installing a mailbox file associated with the disk storage medium, the installation method comprising the steps of:

Obtaining a disk drive access key from an access key server, the access key being generated by the access key server as a function of an identifying characteristic of the disk drive (Column 18, lines 22-57);

Creating a mailbox file in the first range of addressable locations using the access key obtained from the access key server (Column 7, lines 28-48; and Column 18, lines 40-57); and

Notifying the disk drive of a location of the mailbox file in the first range of addressable locations (Column 17, lines 25-63);

But does not disclose that the disk drive can perform an executable function characterized by contents of the mailbox file.

Nowaza, however, discloses obtaining a disk drive access key, creating a mailbox file in the first range of addressable locations using the access key, and that the disk drive can perform an executable function characterized by contents of the mailbox file (Column 5, line 21 to Column 7, line 27). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the file cryptographic system of Nowaza into the software distribution system of Torrubia-Saez in order to offload the troublesome processing of ordinary data encryption/decryption from the host to the disk drive, so that an increase of the burden on the host in connection with data security can be greatly reduced and the secrecy of data to be stored in an external storage device can be secured without degrading the throughput of the system, and to improve security of the whole system (Column 8, line 44 to Column 9, line 45).

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torrubia-Saez in view of Nowaza, further in view of Vogt (U.S. Patent 6,681,304).

Regarding Claim 2,

Torrubia-Saez as modified by Nowaza does not disclose that the function is used to access a second range of addressable locations that

are not disk drive host interface addressable and that are contained on the disk storage medium.

Vogt, however, discloses that the function is used to access a second range of addressable locations that are not disk drive host interface addressable and that are contained on the disk storage medium (Column 2, lines 20-31; and Column 3, lines 33-42). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the hidden storage system of Vogt into the software distribution system of Torrubia-Saez as modified by Nowaza in order to only allow access to private information when an appropriate password (key) is entered, so as to hide this information from malicious users and programs.

Regarding Claim 3,

Torrubia-Saez as modified by Nowaza and Vogt discloses the method of claim 2, in addition, Vogt discloses that the access key is required for an application program to access the second range of addressable locations via the mailbox file (Column 2, lines 20-31; and Column 3, lines 33-42).

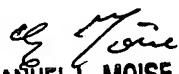
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey D Popham
Examiner
Art Unit 2137


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER